

SMWCon Fall 2016

September 28 to 30, Frankfurt am Main

Overview and introduction to new semantic extensions

Karsten Hoffmeyer - September 29, 2016

SMWCon Fall 2016 - New Semantic Extensions

Overview

- Semantic External Query Lookup
- Semantic Notifications
- Semantic Scribunto
- Summary Cards
- Whats Nearby

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Semantic External Query Lookup

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Semantic External Query Lookup

- First released imminent
 - Created by James Hong Kong (MWJames)
 - Requires SMW 2.4 or later (current alpha)
 - Most probably will require SMW 2.5 or later on initial release
- Allows querying external wikis
 - Integrate query results from a remote wiki on a local wiki
- Uses the Ask API of Semantic MediaWiki
 - Needed to access the remote wiki
 - Currently readapi denied wikis are not supported
 - Files can only be displayed as links

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Semantic External Query Lookup

- Example annotation on remote wiki:

- SMWCon Fall 2016

```
{{#set:Has planned start=2016/09/28}}
```

```
{{#set:Has planned finish=2016/09/30}}
```

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Semantic External Query Lookup

- Example configuration on local wiki:

```
## Semantic External Query Lookup
// Composer
$smwgQuerySources = array(
    'smworg' => 'SMWExternalQueryLookup',
);
$seqlgExternalRepositoryEndpoints = array(
    'smworg' => array(
        'https://www.semantic-mediawiki.org/w/index.php/$1',
        'https://www.semantic-mediawiki.org/w/api.php',
        true
    )
);
```

unique key (= interwiki prefix)

name of corresponding query processor

REQUIRED

interwiki URL

interwiki API

local interwiki?

OPTIONAL

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Semantic External Query Lookup

- Example query on local wiki:

```
{ {#ask:  
  [[SMWCon Fall 2016]]  
  |?Has planned start#-F[Y-m-d]=start date  
  |?Has planned finish#-F[Y-m-d]=end date  
  |source=smworg  
  |mainlabel=conference  
  |headers=plain  
}}
```

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Semantic External Query Lookup

- Example result on local wiki:

Page **Discussion**

My first external query

conference ↕	start date ↕	end date ↕
SMWCon Fall 2016	2016-09-28	2016-09-30

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Semantic External Query Lookup

- Repository

<https://github.com/SemanticMediaWiki/SemanticExternalQueryLookup>

- Documentation

- /README.md
- /RELEASE-NOTES.md
- /docs/00-configurations.md

- Video

<https://youtu.be/sOCh9M2sSvU>

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Semantic Notifications

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Semantic Notifications

- First release imminent
 - Created by James Hong Kong (MWJames)
 - Requires SMW 2.4 or later
- Allows for notifications about changes to structured data:
 - Was the setup of a category or property changed?
 - Was a page added to a category?
 - Was a value added to a property?

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Semantic Notifications

- Makes use of the Echo extension
 - Getting the notification to the individual users
 - On wiki
 - Via e-mail (not yet working)
 - Provides user preference settings

— Notify me about these events —

	Web	Email
Talk page message ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thanks ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mention ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Page link ?	<input type="checkbox"/>	<input type="checkbox"/>
Entity specification change (SMW) ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entity value change (SMW) ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Edit revert ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Email from other user ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User rights change ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Semantic Notifications

- Uses several special properties
 - Needed to define the notification recipients
 - User page = “Notifications group member of”
 - Property/category page = “Notifications to group”
 - Needed to specify the trigger on notifications
 - Specific values or all values = “Notifications on”

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Semantic Notifications

- Example setup:
 - Property page “Project status”

This is a property of datatype `[[Has type::Text]]`. Allowed values for this property are:

- * `[[Allows value::started]]`
- * `[[Allows value::in progress]]`
- * `[[Allows value::completed]]`
- * `[[Allows value::in-budget]]`
- * `[[Allows value::over-budget]]`

```
{{#subobject:
  |Notifications on=started,in progress,completed|+sep=,
  |Notifications to group=project member group, project management group|+sep=,
}}
```

```
{{#subobject:
  |Notifications on=over-budget
  |Notifications to group=project management group,project controller group|
+sep=,
}}
```

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Semantic Notifications

- Example setup cont.:
 - User page “Karsten Hoffmeyer”

This user belongs to the `[[Notifications group member of::project member group]]`.

- Wiki page “Project SMWCon”

`{{PAGENAME}}` is currently `[[Project status::in progress]]`.

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Semantic Notifications

Example result:

The screenshot displays the Semantic MediaWiki Sandbox interface. On the left is a sidebar with links: Main page, Recent changes, Semantic MediaWiki (Getting started, Introduction, User manual, Admin manual), Further Links (Report a bug, Source code, Code documentation, OSDA), and Tools. The main content area has a 'Welcome' message and a section titled 'How to create a quality example?'. A top navigation bar includes language options, user name, and various action links. A notification overlay is shown on the right, titled 'Alerts'. It contains three notifications: a 'Project SMWCon' value modification (highlighted with an orange box and labeled 'change highlighter'), a welcome message for the first edit (labeled 'notification of change of property value'), and a general welcome message. The overlay also features links for 'All notifications' and 'Preferences'.

Sidebar:

- Main page
- Recent changes
- Semantic MediaWiki
 - Getting started
 - Introduction
 - User manual
 - Admin manual
- Further Links
 - Report a bug
 - Source code
 - Code documentation
 - OSDA
- Tools

Top Bar: English, Karsten Hoffmeyer, 1 notification, 0 likes, Talk, Preferences, Watchlist, Liste de suivi sémantique, Contributions, Log out

Main Content:

Welcome

This "sandbox" allows you to carry out experiments and the language of this wiki is set to **French (fr)**.

If you are looking for information about Semantic MediaWiki, please do not add material that is any way offensive, this page is cleared regularly. A list of available extensions can be found [here](#).

How to create a quality example ?

If you have encountered an issue and you would like to make an observation public to other participants then please have [create a quality example](#).

Notification Overlay:

Alerts

- Project SMWCon** had a value modification
"Project status" assignment was altered.
Kghbln View changes ... 5m
- You just made your first edit; thank you, and welcome!
... notification of change of property value 18m
- Welcome to Semantic MediaWiki - Sandbox, Karsten Hoffmeyer!
We're glad you're here.
... 22m

[All notifications](#) [Preferences](#)

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Semantic Notifications

- Repository

<https://github.com/SemanticMediaWiki/SemanticNotifications>

- Documentation

- /README.md
- /RELEASE-NOTES.md
- /docs/README.md
- /docs/01-workflow.md
- /docs/02-tips.md
- /docs/...

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Semantic Scribunto

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Semantic Scribunto

- First released imminent
 - Created by James Hong Kong (MWJames)
 - Requires SMW 2.3 or later
- Provides native support of Semantic MediaWiki to the Scribunto extension

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Semantic Scribunto

- Probably a bit esoteric for non-programmers
- Used with the `#invoke` parser function
- Provides two functions
 - `mw.ext.smw.getQueryResult` returns the same serialization format as the API module “`api.php?action=ask`”, i.e. json
 - `mw.ext.smw.getPropertyType` returns a simple string e.g. “`_dat`”

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Semantic Scribunto

- Repository

<https://github.com/SemanticMediaWiki/SemanticScribunto>

- Documentation

- /README.md
- /RELEASE-NOTES.md
- /docs/invoke.md

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Summary Cards

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Summary Cards

- First release imminent
 - Created by James Hong Kong (MWJames)
 - No hard requirement on Semantic MediaWiki
- Allows to display content summaries on hovered links
- Semantic MediaWiki helps generating individual content for the summary cards (e.g. fetch info from a property that contains short description, an image, known keywords, modification date, etc.)

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Summary Cards

Features

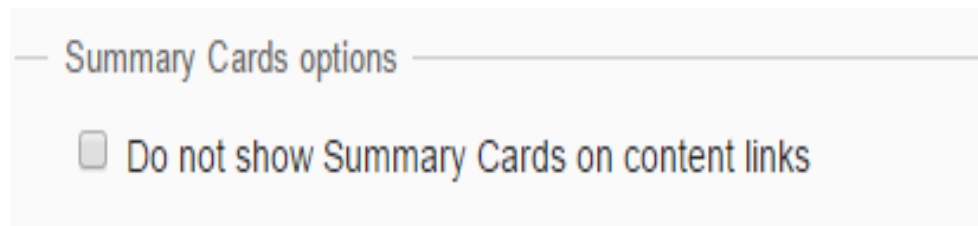
- Uses user defined templates to display the content
- Different templates may be used on a per namespace basis (requires configuration)
- Provides parameters for more efficient creation of templates, e.g. `{{{subject}}}` , `{{{isCategory}}}` , etc.

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Summary Cards

Features

- Integrates with the `int:` parser function for multilingual capabilities
- Allows for caching to reduce load
- Provides user preference setting (yes/no)



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Summary Cards

- Example template: (just Wikitext, stripped from HTML and CSS)

```
<!-- IMAGE -->
```

```
{{#ifeq: {{{isFile}}} | true | [[{{{subject}}}|80px|thumb]] }}{{#ifeq: {{#show:
{{{subject}}} |?Has portrait|default=false}} |false | [[{{#show: {{{subject}}} |?Has
portrait|link=none|limit=1}}|80px|thumb]] }}
```

```
<!-- DESCRIPTION -->
```

```
{{#ifeq: {{#show: {{{subject}}} |?Has monolingual description|default=false}} |false | |
{{#ask:[[-Has monolingual description::{{{subject}}}]] [[Language code::
{{{userLanguage}}}]] |?Text |link=none |headers=hide |mainlabel=- }} }}
```

```
Subject: {{{subject}}}
```

```
{{#show: {{{subject}}} |?Has description}}
```

```
{{#ifeq: {{{isProperty}}} |true |Type:{{#show: {{{subject}}} |?Has type }} }}
```

```
User language: {{{userLanguage}}}
```

```
Namespace: {{{namespace}}}
```

```
isCategory: {{{isCategory}}}
```

```
isFile: {{{isFile}}}
```

```
Modification date: {{#show: {{{subject}}} |?Modification date#LOCL |default=N/A}}
```

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Summary Cards

- Example result:

Search results

bach

[Content pages](#) [Multimedia](#) [Translations](#) [Everything](#) [Advanced](#) By L

Filter by Language

Create the page "**Bach**" on this wiki! See also the search results found.

[Johann Sebastian Bach \(Q1339\)](#)

`[display as= Johann Sebastian Bach (Q1339)]` and `[{{display as= Johann Sebastian Bach (Q1339)}}]`

571 B (73 words)

ヨハン・ゼバスティアン・バハ

{{interlanguage|en}}

651 B (40 words)

Summary Card

Subject: Q1339

German composer,
organist, harpsichordist,
violinist and violinist

User language: en

Namespace:

isCategory: false

isFile: false

Modification date: 22:13:27, 6 April 2016



Browse wiki

[RDF](#) [Help](#)

Johann Sebastian Bach (Q1339)

Has common name [Johann Sebastian Bach \(Q1339\)](#) + [?](#)

Has description

Summary Card

Subject: Q1339

German composer,
organist, harpsichordist,
violinist and violinist

User language: en

Namespace:

isCategory: false

isFile: false

Modification date: 22:13:27, 6 April 2016



Has

Creation

Display title of [Johann Sebastian Bach \(Q1339\)](#) + [?](#)

Categories [Human](#)

Last editor is [User:Kghbln](#) + [?](#)

Modification date 22:13:27, 6 April 2016 + [?](#)

Is a new page false + [?](#)

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Summary Cards

- Repository

<https://github.com/SemanticMediaWiki/SummaryCards>

- Documentation

- /README.md
- /RELEASE-NOTES.md
- /docs/01-content-summaries.md
- /docs/02-template-examples.md

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Whats Nearby

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Whats Nearby

- First release imminent
 - Created by James Hong Kong (MWJames)
 - Requires Maps 3.5+
 - No hard requirement on Semantic MediaWiki
- Provides additional HTML5 geolocation information to templates
- Semantic MediaWiki helps generating distance queries to create adaptive maps

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Whats Nearby

Features

- Display queryable content that depends on variable location information
(`detectLocation`, `watchLocation`)
- Instantly modify distance queries (`@@radius`) from a page view that relies on static coordinates
- Generate dynamic queryable location lists via `#ask`

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Whats Nearby

Features

- Provides the `#nearby` parser function
- Provides geolocation information to user defined templates to display information on locations
- Provides parameters to be used, e.g. `querytemplate` , `detectlocation` , etc.

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Whats Nearby

- Example query:

```
{ {#nearby:  
  |querytemplate=Local libraries,Point of interest  
  |coordinates=47° 37' 13.9368'' N,122° 20' 56.8860'' W  
  |radius=300 m  
  |interval=450  
  |max=10000  
  |maps=googlemaps  
  |detectLocation=true  
  |watchLocation=false  
  |localCache=300  
  |controls=slider  
}}
```

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Whats Nearby

- Example query template:

Shows libraries from point `{{#ask: [[Has coordinates::{{{latitude}}} , {{{longitude}}}] |limit=1|link=none|default={{latitude}}, {{{longitude}}}|searchlabel= }}` in a distance of `{{radius}} {{unit|}}`.

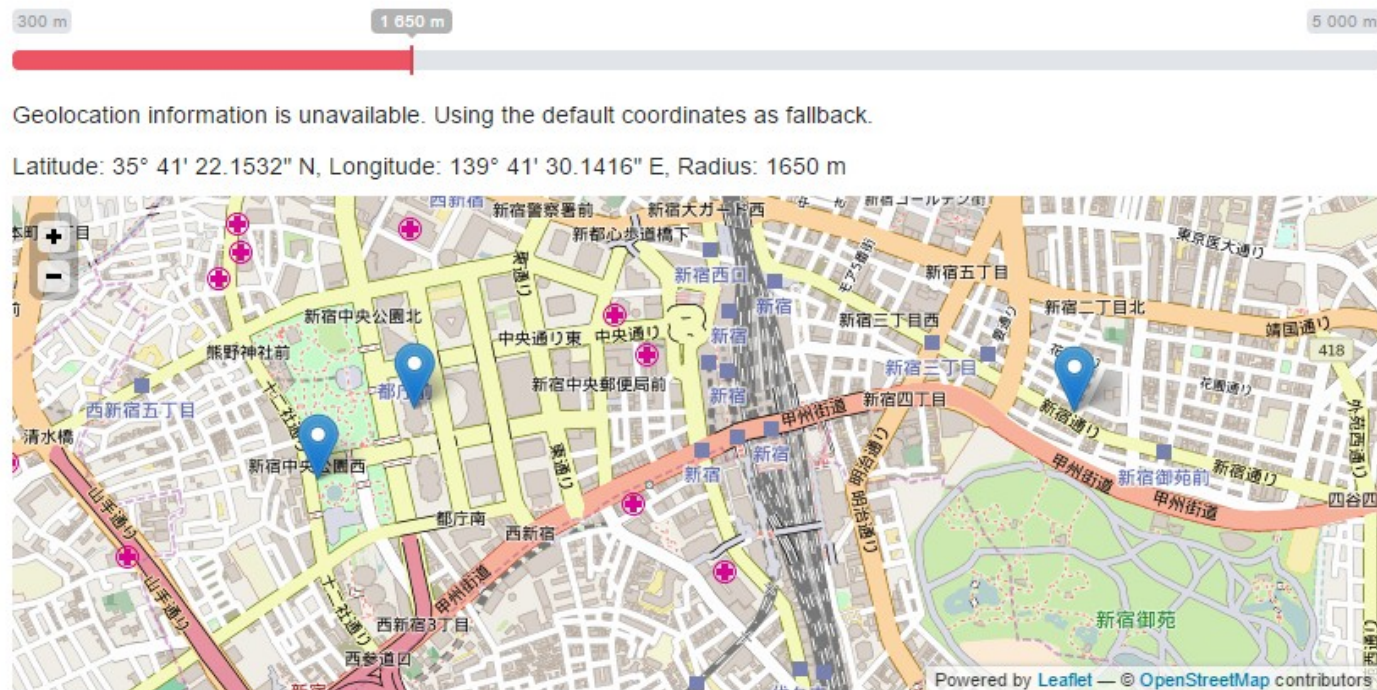
```
{{#ask:
  [[Category:Library]]
  [[Has coordinates::{{{latitude}}}, {{{longitude}}} ({{{radius}}}
  {{{unit|}}})]]
  |?Has coordinates
  |?Has library
  |format = {{{maps|}}}
  |width=250
  |height=250
  |userparam={{latitude}},{{{longitude}}}
  |template=Distance Popup
  |default=No location found for the current distance.
}}
```

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Whats Nearby

- Example result:

Main Page



	Has sightseeing spot	Has description
Tokyo	Hanazono Shrine	花園神社 is a Shinto shrine located in Shinjuku, Tokyo, Japan. This shrine was founded in the mid-17th century ...
Tokyo	Taisoji	

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Whats Nearby

- Repository

<https://github.com/SemanticMediaWiki/WhatsNearby>

- Documentation

- /README.md
- /RELEASE-NOTES.md
- /docs/01-nearby.md
- /docs/02-example.semantic.distance.maps.tmpl.md
- /docs/02-example.semantic.query.tmpl.md